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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,265	08/22/2003	Sheng-Nan Lu	P-3641.251	9465

7590 07/08/2004

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EXAMINER

WILLIAMS, MARK A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/646,265

Applicant(s)

LU ET AL.

Examiner

Mark A. Williams

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh, US Patent 5,970,819, in view of Lu, US Patent 5,208,944, or Ching, US Patent 5,772,351, or Chung, US Patent 6,163,928. Katoh discloses a hinge assembly comprising a fixing seat 5c adapted to connected to a laptop computer mainframe; a position seat 1 adapted to connect to a laptop computer screen and having a first annular body 2a defining therein a first position hole 2b and a second annular body 3a opposite to the first annular body and defining therein a second position hole 3b; a fixing ring 4 having a first side face securely engaged with the first annular body and a second side face opposite to the first side face and provided with a pair of notches 4b; a position ring 7 having a pair of protrusions 7b extending out to correspond to the pair of notches of the fixing ring; a securing device 9; and a connection rod 5 extending through the fixing seat, the first annular

body, the fixing ring, the position ring, the second annular body to securely sandwich the fixing ring and the position ring between the first annular body and the second annular body so as to securely engage with the securing device, whereby pivotal movement of the position seat relative to the fixing seat drives the position ring to pivot such that the protrusions are alternatively received in the corresponding.

Katoh discloses the claimed invention expect a plurality of resilient pads, as claimed. Each of Lu, Ching, and Chung teach such pads as well known in the art for providing axial biasing forces, for controlling hinge motion, similarly to a helical compression spring. It would have been obvious at the time the invention was made for one skilled in the art to have replace the spring of Katoh with elastic, resilient pads, as shown in each of Lu, Ching, and Chung, as well known in the art for providing axial biasing forces, for controlling hinge motion.

3. Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh in view of Lu, Ching, or Chung. Although the combination does not explicitly teach the particular connecting structure between the first annual body and the fixing ring, as claimed, it is well known in the art to utilize a variety of shaped surfaces to achieve an equivalent connection between such members. It

would have been an obvious matter of design choice to make the different portions of the annular body and the fixing ring of whatever form or shape was desired or expedient, in order to achieve an equivalent connection. A change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. Such a modification is not critical to the design and would have produced no unexpected results.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Williams whose telephone number is (703) 305-3438. The examiner can normally be reached on Monday through Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Williams  
6/27/04

*MW*

  
HEATHER SHACKELFORD  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600